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Feeding and Care of the Dairy Herd

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Feeding and Care of the Dairy Herd

By
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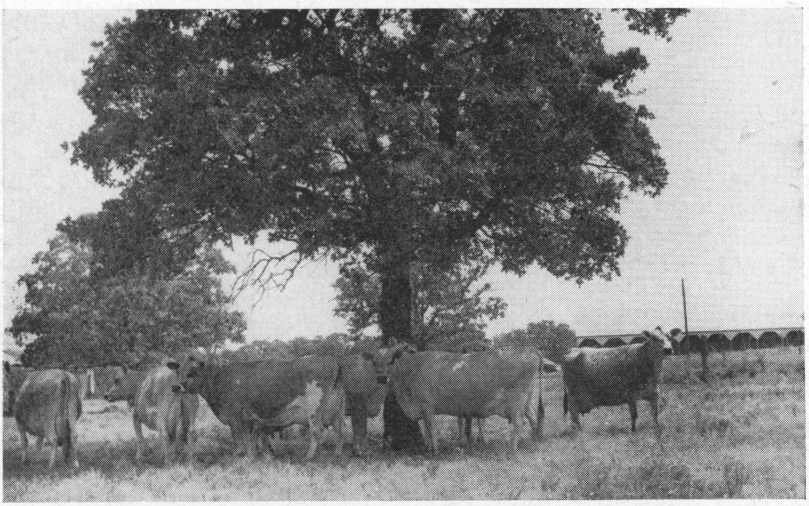
PROFITABLE dairying depends upon an ample year-round supply of good, cheap feed. The best and cheapest feed for a dairy cow is good permanent pasture . . . the kind that enables a cow to get all she wants in about two hours of grazing. Many pastures require the cow to graze all day to get enough grass to fill her stomach. Where this condition exists, most of the feed nutrients the cow gets from the grass are used to furnish energy to walk around to graze and little is left for milk production. In addition to grazing, a cow needs enough hay and silage to keep her well filled every day of the year. Since she cannot get enough of the milk making elements from a stomach full of the best grass to produce much milk, she must have concentrate feeds to supply the extra nutrients needed.

A milk cow needs shade in warm weather and protection from cold in bad weather. Also the cow needs an abundant supply of fresh, clean, cool water in summer and fresh, clean, warm water in winter. Pasture, shade, and water should be located so that the cow will not have to do much walking to get from one to the other.



Have Permanent and Temporary Pastures

To have good permanent pastures, it is necessary not to overgraze. Give the grass a chance to grow and make seed so that the ground will have a better grass cover. This will also help choke out weeds. Where possible the pasture should be mowed to control weeds.

In parts of Texas the permanent pasture can be improved by including grasses and clovers. See your county agricultural agent for recommendations on improving permanent pastures. Less acres of permanent pastures will be required if the pasture is divided into two or more pastures and the grazing alternated from one to the other. The amount of permanent pasture needed varies from one-half acre up to five acres where dairy cows are kept. On some beef cattle ranges the amount of pasture needed runs up to 25 acres or more per cow. This would not be suitable for dairy cattle.

With the best care and management, it is not possible to have good permanent pasture all the year because of dry weather and cold weather. Good cows cannot maintain production on dry pastures. Temporary pastures are needed to supplement the permanent pasture. Sudan grass is the best temporary pasture for summer and early fall. Small grain such as oats, barley, and wheat are the best for late fall, winter, and early spring.

For best results sudan grass should be planted in rows. In some sections rows should be three feet apart, in some thirty inches, and others eighteen inches apart. The sudan grass pasture should be divided into two or more pastures. This will permit alternate grazing and thereby give more grazing per acre. Never let sudan grass head out, as this lowers the feeding value of the grass and stops further growth. If there are not sufficient cows on the pasture to prevent the sudan grass from heading, it should be mowed. Cut before heading out, sudan grass makes good hay. It can be used for silage, too.

Small grain should be sown in September to permit good growth and some grazing before freezing weather. It will stand more cold and give more grazing by sowing early.

Silage Is the Best Substitute For Pasture

With all the planning of permanent and temporary pastures, it is not possible to have good, green, succulent grazing the entire year. The best substitute for pasture is silage. The better the quality of feed put into a silo, the better will be the silage. Corn and grain sorghums are best. However, sweet sorghums

(such as red top and seeded ribbon cane) are good. The best stage for making silage from sorghum crops is when the grain is mature as possible with stalks and leaves still green. Corn makes best silage when grain is in hard dough stage and before lower leaves begin to lose their green color. Cows can eat more silage made from ripe feeds without scouring because of its lower acidity. A succulent feed makes it easier to maintain production. Milk is 85 to 87 percent water. The cow cannot produce milk without water any more than she can without feed. The more water the cow gets in her feed the less she needs to drink.

If a cow is fed dry roughage (hay or grain sorghum bundles) along with silage, she will eat about 10 pounds of hay and 30 pounds of silage per day. If no hay is fed, an average cow will eat about 50 pounds of silage per day. On this basis, three tons of silage will be needed per cow per year. Over the most of Texas a reserve of three tons of silage will be needed to take care of dry years. This means that when a good crop is made, six tons of silage should be put down for each cow.

Hay is needed to fill the gap in the feed supply when pastures begin to fail. When the hay allowance is increased to offset the loss in graz-

ing, milk production holds up close to what it was when grass was good. A safe practice is to feed all the good hay that cows will clean up every day in the year.

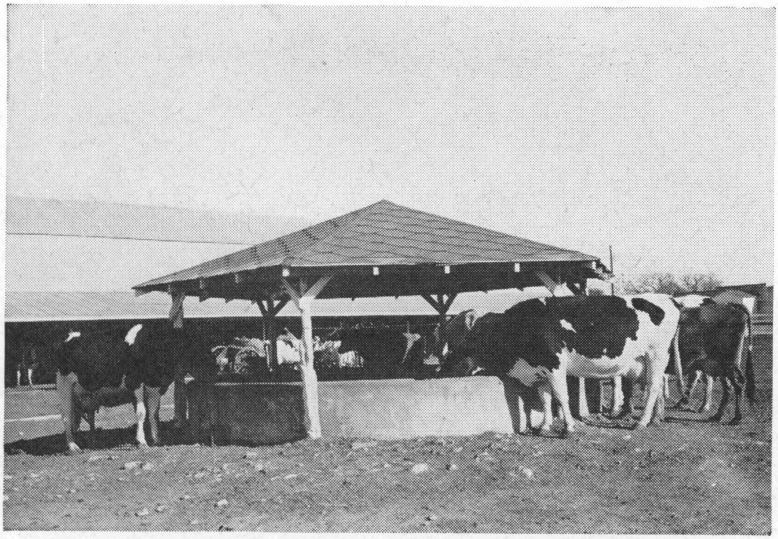
Keep Water Clean and Cool

To get high producing cows to drink enough water to maintain production, it is necessary to keep the water clean and cool in summer. The trough should be drained and cleaned at least once each week. A shade six feet high should be built over the trough. The shade should be larger than the trough, otherwise the water will be shaded only about an hour during the middle of the day when the sun is overhead. When the temperature of drinking water gets down close to freezing, it should be warmed by using some type of a heater. An old oil barrel with a fire built in it will do the job.

A Good Dairy Cow Needs Plenty of Roughage

In addition to pasture and silage, a good dairy cow needs dry roughage such as hay or bundle feed at all times. The dry roughage is especially important in the early spring when grass is "sappy" or "watery." Sappy grass will cause cows to scour if they do not get some dry roughage.

Where silage is made from ripe feed, the cows will probably not eat much dry rough-



age, but it should be offered them. For best results, hay should be a legume hay such as alfalfa, cowpeas, soybeans, or peanuts. Legume hays furnish more protein than nonlegume hays such as cane, sudan grass, and Johnson grass.

Roughages are the bulky feeding stuffs that are higher in fiber and lower in total digestible nutrients. Such feeds as hay, fodder, straws, silage, and cottonseed hulls belong in this class. Some people grind grain sorghum bundles, head and stalk, and call it a concentrate. This is a mistake. Roughage ground is still a roughage. Concentrate feeds are low in fiber and furnish a high percentage of total digestible nutrients. Such feeds as corn, grain, sorghum heads or threshed grain, oats, barley, wheat, wheat bran, and cottonseed meal are concentrates. Ground hulls with molasses are n o t a concentrate. Neither is ground alfalfa hay with molasses added. WITH LITTLE OR NO GRAZING, COWS N E E D ABOUT 2 POUNDS OF HAY D A I L Y FOR EACH 100 POUNDS OF LIVE WEIGHT.

Feed Concentrates According To Production

Any cow worth keeping is entitled to all the roughage, including pasture, silage, and hay that she can eat. The concentrate feed or grain mixture should be fed according to production. The amount of the concentrate to feed per gallon of milk depends upon the kind and amount of rough-

Continued on Page 10

Your Roughages Determine the Concentr

ROUGHAGES

ARE THE BASE OF ALL GOOD DAIRY RA

THEY CAN BE GROUPED AS SHOWN BE

HIGH PROTEIN ROUGH-AGES	Alfalfa Hay Peanut Hay Cow Pea Hay Clover Hay Good Pasture	Contain About 14% Protein	CALL FOR	Ap 13 in mi
MEDIUM PROTEIN ROUGH-AGES	Hay cut in bloom stage (Johnson, Sudan, Bermuda, Cane). Second quality legume hays. Pastures approaching maturity. Mixtures of high and low protein hays.	Contain About 10% Protein	CALL FOR	Ap 17 in mi
LOW PROTEIN ROUGH-AGES	Hay cut in mature stage. (Johnson, Sudan, Bermuda, Cane). Cottonseed hulls Bundles Corn or sorghum silage	Contain About 6% Protein	CALL FOR	Ap 20 in mi

BY FEEDING ALL THE GOOD ROUGHAGE YOUR COWS NEE

FED ACCORDI

Jerseys and Guernseys

Other Breeds

For Analyses of Common Feeds, See pages 14, 15, and 16 of

ixture You Should Feed Your Dairy Cows

		CONCENTRATES		
		CORN or Grain Sorghums Wheat Barley Dried Sweet Potatoes Dried Citrus Pulp	OATS or Wheat Bran (one or more of these feeds)	COTTONSEED MEAL or Linseed Meal Soybean Meal Peanut Meal Corn Gluten Meal
tely n ate	CONSIST- ING OF	60 lbs.	25 lbs.	15 lbs.
tely n ate	CONSIST- ING OF	55 lbs.	20 lbs.	25 lbs.
tely n ate	CONSIST- ING OF	50 lbs.	20 lbs.	30 lbs.

PRODUCTION CAN BE MAINTAINED WITH CONCENTRATES

PRODUCTION

concentrate to 3 lbs. milk daily

concentrate to 4 lbs. milk daily

ılletin.

Your Roughages Determine the Concentrate Mixture You Should Feed Your Dairy Cows

ROUGHAGES ARE THE BASE OF ALL GOOD DAIRY RATIONS THEY CAN BE GROUPED AS SHOWN BELOW						CONCENTRATES		
						CORN or Grain Sorghums Wheat Barley Dried Sweet Potatoes Dried Citrus Pulp	OATS or Wheat Bran (one or more of these feeds)	COTTONSEED MEAL or Linseed Meal Soybean Meal Peanut Meal Corn Gluten Meal
HIGH PROTEIN ROUGHAGES	Alfalfa Hay Peanut Hay Cow Pea Hay Clover Hay Good Pasture	Contain About 14% Protein	CALL FOR	Approximately 13% protein in concentrate mixture	CONSISTING OF	60 lbs.	25 lbs.	15 lbs.
MEDIUM PROTEIN ROUGHAGES	Hay cut in bloom stage (Johnson, Sudan, Bermuda, Cane). Second quality legume hays. Pastures approaching maturity. Mixtures of high and low protein hays.	Contain About 10% Protein	CALL FOR	Approximately 17% protein in concentrate mixture	CONSISTING OF	55 lbs.	20 lbs.	25 lbs.
LOW PROTEIN ROUGHAGES	Hay cut in mature stage. (Johnson, Sudan, Bermuda, Cane). Cottonseed hulls Bundles Corn or sorghum silage	Contain About 6% Protein	CALL FOR	Approximately 20% protein in concentrate mixture	CONSISTING OF	50 lbs.	20 lbs.	30 lbs.

BY FEEDING ALL THE GOOD ROUGHAGE YOUR COWS NEED, MILK PRODUCTION CAN BE MAINTAINED WITH CONCENTRATES FED ACCORDING TO PRODUCTION

Jerseys and Guernseys	1 lb. concentrate to 3 lbs. milk daily
Other Breeds	1 lb. concentrate to 4 lbs. milk daily

For Analyses of Common Feeds, See pages 14, 15, and 16 of this Bulletin.

age the cow is getting. On good, green pasture or legume hay she should get about three pounds of grain mixture per day for each gallon of milk produced. When the cow is getting dry pasture or non-legume hay or silage, she should receive about four pounds of grain mixture per day to each gallon of milk produced.

Without oats or wheat bran some dairymen use a good grade of chopped legume hay. Grinding a legume hay does not make it a concentrate. It adds bulk to a heavy mixture of grain. When substituting legume hay for oats or wheat bran, feed a little heavier on the concentrate mixture to bring up total nutrients . . . 107 pounds of mixture with chopped legume hay will replace 100 pounds without hay.

Grain Mixture Depends on Feed Grown and Roughage Fed

The kind of grain mixture to use depends upon the kind of feed that can be grown and upon the kind of roughage the cow is getting. A low protein roughage requires a high protein grain mixture. A high protein roughage requires a low protein grain mixture. The table on pages 8 and 9 shows how to suit the grain mixture to the available roughage.

Comparing Protein Supplements

For all practical purposes a pound of protein from one protein supplement can be substituted for a pound from another supplement. Be sure to read the analysis on the feed tag, since all supplements do not contain the same pounds of protein per hundred pounds. It is easy to see that if one supplement shows 43 percent protein and another one shows 28 percent, a sack of the second one would not have the pounds of protein that a sack of the first one would contain. It would take one and one-half sacks of the 28 percent supplement to furnish the pounds of protein contained in one sack of the 43 percent protein supplement.

Balanced Dairy Herd Feeding

To use the table on pages 8 and 9, first determine the level of protein in the roughages being fed. If good alfalfa hay is being fed along with Johnson grass hay in equal amounts, this mixture of hays could be classed as a medium protein roughage. Because of the wide variation in protein content at the different stages of maturity with all crops, it is necessary to take this into consideration in estimating the protein content of roughages.

Second, read across the page to the right hand side. Select one or more of the feeds from each list. Using them in the proportions indicated, a concentrate mixture approxi-

mating what is needed will result. If 1000 pounds of feed are to be mixed, then multiply each amount by ten.

Example: Suppose that you are feeding a medium protein roughage and you want a concentrate mixture that is suitable for feeding along with this roughage. Reading across the page we see that these roughages contain about 10 percent protein and call for a concentrate mixture containing approximately 17 percent protein. We can make this by mixing 55 pounds of ground ear corn or the same amount of any of the feeds listed under corn, 20 pounds of ground oats or wheat bran, and 25 pounds of 43% cottonseed meal or some other protein supplement containing the same amount of protein.

Whenever there is any question about the protein level being too high or too low, use the procedure shown below for finding the percentage of protein in a concentrate mixture. If the concentrate mixture proves to be somewhat high or low, it can be adjusted by varying the amount of the protein supplement. With most rations the protein level will work out about as desired by following the table. Using the feeds listed and the protein levels indicated, the resulting ration will contain the desired ratio between protein and energy nutrients.

If a grain mixture with a higher protein content is needed, it will be necessary to add more of the high protein supplement. By trial and error you can find just how much protein supplement is needed in order to have the desired protein level in the concentrate mixture.

Finding the Average Protein Content of Several Concentrates

Sometimes it is necessary to calculate the protein content of a combination of feeds. To do this, find the total pounds of protein contained in each concentrate feed by referring to the table in the back of this bulletin. Then divide the total pounds of the concentrate into the total pounds of protein to find the percent protein. For example:

100 lbs. gr. ear corn containing	8.0%	protein contains	8.0 lbs.
100 lbs. gr. oats containing	11.0%	protein contains	11.0 lbs.
100 lbs. wheatbran containing	14.5%	protein contains	14.5 lbs.
30 lbs. cottonseed meal containing	43.0%	protein contains	12.9 lbs.
330 lbs.			46.4 lbs.

330 divided into 46.4 equals 14 or the percent protein of the above mixture.

Finding the Average Protein Content of Several Roughages

Whenever it is necessary to calculate the average protein content of several roughages, the following procedure is suggested:

The average large dairy cow weighing around 1000 pounds will consume about 20 pounds of dry matter daily in the form of roughages. Knowing the amount of hay and silage being consumed by the average cow in the herd, the amount of dry matter in the form of grass can be obtained by subtracting the pounds of known dry matter from the total required by the cow. For example: A cow is being fed 6 pounds of cane hay, and she is grazing on good sudan grass pasture, twenty minus six means that she is getting fourteen pounds of dry matter from the sudan grass. By referring to the feed analysis table, find the protein content of 6 pounds of cane hay and 14 pounds of sudan grass, dry basis, then divide the total by 20 pounds.

Cows Need Minerals

A cow knows when she needs minerals. Waiting until she shows a craving for minerals by chewing bones and sticks or eating dirt is expensive business. The best way to meet a cow's mineral needs is through feeds grown on soils rich in the required elements. Mineral supplements are second best. While there are several mineral elements needed by cows, calcium and phosphorus are needed in greatest quantities. Most Texas soils are short on phosphorus.

Sources of phosphorus for dairy cows are wheat bran, cottonseed meal, and supplements such as steamed bone meal and dicalcium phosphate. Sources of calcium are limestone or oyster shell flour. If the grain ration contains as much as one-fourth wheat bran and cottonseed meal, the phosphorus requirement is fairly well met. Two percent of a calcium supplement should be added to the grain mixture. When little or no cottonseed meal and wheat bran are included in the grain mixture, add two percent steamed bone meal. Include one percent salt in the grain mixture.

Some trace mineral elements needed are iron, copper, cobalt, iodine, manganese, and magnesium. For the most part, feeds commonly used in dairy rations contain suffi-

6 lbs. cane hay averaging	6.4%	protein contains	.38 lbs. protein
14 lbs. sudan grass averaging	8.8%	protein contains	1.23 lbs. protein
20 lbs.			1.61 lbs.

20 lbs. total divided into 1.61 lbs. equals 8 per cent.

cient amounts of the trace minerals. There is some indication that high producing herds need additional amounts. Because of the uncertainty about requirements for trace minerals by dairy cattle, there is a tendency to attach too much importance to them.

Add Salt to the Ration

Keep loose salt before dairy cattle at all times. Do not use block salt. A good dairy cow needs too much salt for her to take the time to lick it from a block. Using a covered mineral feeder helps to keep a supply of salt and minerals before the herd. The box should be divided so that salt can be kept in one side and a simple mineral mixture of three parts steamed bone meal and one part salt in the other side. Your county agricultural agent has plans for a covered mineral feeder. The mineral feeder is especially needed for dry cows and young herds not receiving supplemental feeds.

Vitamin A Is Necessary

Of all the vitamins known, vitamin A is of most importance to dairy cattle. When vitamin A intake is insufficient, milk production falls off, breeding is irregular and uncertain, and resistance to disease is lowered. It is especially important to young calves.

Green feeds contain vitamin A. Young, tender grass is highest. Bright green legume hays are the next best homegrown sources. Silage made from crops that still retain their green color is another source of vitamin A. Dehydrated leaf meal is commonly used as a vitamin supplement in mixed feeds.

Keep the Bull in a Pen

The bull should be kept in a pen of at least one-half acre in size to allow room for exercise and some green feed. The bull should have green feed each day to furnish vitamin A which is essential to health. If no green grass is available in the bull's pen, he should be given three or four pounds of peagreen alfalfa hay.

A shed opening into the pen is a practical shelter for a bull. This should be arranged so that the bull can be fed and watered without the attendant having to enter the pen. Newspapers frequently tell of persons being injured or killed by bulls as a result of improper equipment or wrong handling.

Under no condition should a bull be placed in a pen or pasture that does not have a good fence. The bull should never be allowed to run in the pasture with the cows. The bull pen should be equipped with a breeding chute so that the cows do not have to enter the bull pen for service. See Extension Service C-146, "Build a Safety Bull Pen," for description and drawing of a breeding chute.

READ THE FEED CONTROL TAG

Every sack of feed other than whole grain has or should have a feed control tag attached to it. This tag is put there for the consumer's protection. Be sure to read the tag before buying the feed. The lower the crude fiber and the higher the carbohydrates the better the feed. Determine the carbohydrates by multiplying the fat by two and one quarter and add this to the nitrogen free extract.

Suppose you were purchasing an 18 percent protein dairy feed. Suppose you find three different 18 percent protein feeds with the following guarantees:

	No. 1	No. 2	No. 3
Protein	18	18	18
Fat	3	3	3
Fiber	10	12	15
Nitrogen Free Extract	50	47	43

It is easy to see that feed No. 1 is better than feed No. 2 and No. 2 is better than No. 3.

COMPOSITION OF SOME OF THE COMMONLY USED FEEDS (DRY BASIS)

Use Figures in First Column in Figuring Balance Ration

CONCENTRATES

Feed	% Crude Protein	% Fat	% Crude Fiber	% Nitrogen Free Extract	% Digestible Protein
Barley	11.0	1.5	6.0	65.0	8.8
Citrus Meal and Pulp	6.5	1.1	9.3	66.0	4.8
Corn Chops	9.0	3.5	3.0	70.0	5.8
Corn Feed Meal	9.0	3.5	3.0	70.0	5.8
Corn Bran	8.0	5.0	12.0	60.0	4.3
Corn Ear with Shuck	7.8	2.8	10.0	62.0	4.7
Cottonseed	21.0	17.0	20.0	25.0	14.7
Cottonseed whole pressed	28.0	6.0	23.0	29.0	22.4
Cottonseed meal	43.0	6.0	12.0	23.0	35.7
Hegari threshed	10.0	2.5	3.0	70.0	6.9
Hegari heads	8.5	2.5	8.0	65.0	5.9
Hominy feed	10.0	6.0	7.0	60.0	6.8
Kafir threshed	10.0	2.5	3.0	70.0	7.0
Kafir heads	8.5	2.5	8.0	65.0	5.9
Linseed meal	38.0	5.2	7.5	35.4	33.5
Milo threshed	10.0	2.5	3.0	70.0	7.3
Milo heads	8.0	2.5	8.0	65.0	6.1
Oats	11.0	4.0	12.0	58.0	8.8
Peanut meal	43.0	6.0	12.0	23.0	37.5

Feed	% Crude Protein	% Fat	% Crude Fiber	% Nitrogen Free Extract	% Digestible Protein
Rice Bran	12.0	12.0	13.0	42.0	8.5
Rye Ground	12.0	1.7	2.0	70.0	10.0
Soybean meal	44.0	6.5	5.6	28.5	35.7
Spelt	12.0	1.9	9.8	63.8	9.6
Sweet potatoes (dried)	7.4	0.9	2.9	80.7	5.7
Wheat	12.0	2.0	3.0	70.0	9.8
Wheat bran	14.5	3.0	10.0	50.0	11.4
Wheat shorts	17.0	4.0	6.0	55.0	14.4

DRY ROUGHAGES

Alfalfa hay	14.0	1.5	33.0	35.0	8.9
Bermuda grass hay (mature)	5.2	0.9	38.8	37.7	2.3
Bermuda grass hay (immature)	8.0	1.8	25.6	48.4	3.8
Cowpea hay	13.1	2.9	30.6	33.9	9.0
Cottonseed hulls	3.0	0.5	50.0	30.0	0.3
Dallis grass hay	8.7	1.8	32.1	40.3	5.1
Hegari bundles, heads & stalk	7.0	2.0	20.0	55.0	2.7
Hegari bundles without heads	5.5	1.9	28.5	43.7	2.2
Johnson grass (seed formed)	6.0	1.7	29.1	45.6	2.5
Johnson grass (in bloom)	8.4	1.5	30.7	41.7	4.7
Johnson grass (before heading)	13.0	2.0	22.5	41.2	8.0
Kafir bundles, heads & stalks	7.0	2.0	20.0	55.0	3.7
Kafir bundles without heads	5.5	1.9	28.5	43.7	2.2
Lespedeza hay (in bloom)	13.4	1.8	25.8	42.8	10.1
Milo bundles, heads & stalks	6.5	1.9	20.0	55.0	2.5
Milo bundles without heads	3.3	1.6	33.5	45.0	1.3
Mesquite grass hay	6.9	1.9	26.2	43.3	3.5
Oat hay	8.3	2.7	35.7	45.0	4.5
Oat straw	4.0	2.3	36.1	41.2	0.9
Peanut hay with nuts	13.2	10.5	22.1	33.7	10.0
Peanut hay without nuts	10.0	3.5	24.0	44.0	6.4
Peanut hulls	5.6	0.6	67.6	15.9	0.0
Prairie grass hay	5.3	1.8	30.1	47.0	2.7
Rhodes grass hay	5.6	1.3	33.0	43.1	2.5
Rice straw	3.7	1.5	31.6	40.1	0.8
Sorghum cane (seed formed)	5.3	2.8	28.5	48.0	1.7
Sorghum cane (in bloom)	7.7	4.6	20.2	52.4	4.2
Soybean hay	15.0	5.8	31.1	29.0	9.0
Sudan grass (seed formed)	6.0	1.7	29.1	45.6	2.5
Sudan grass (in bloom)	8.4	1.5	30.7	41.7	4.7
Sudan grass (before heading)	13.0	2.0	22.5	41.2	8.0
Sweet clover (in bloom)	13.6	1.8	31.7	37.9	10.2
Wheat straw	3.8	1.5	35.7	40.9	0.8

SILAGES

(DRY BASIS)

Feed	% Crude Protein	% Fat	% Crude Fiber	% Nitrogen Free Extract	% Digestible Protein
	%	%	%	%	%
Corn silage	7.3	2.3	24.9	51.9	4.0
Hegari silage	7.1	2.7	18.3	54.4	2.0
Japanese seeded ribbon cane silage	3.1	1.5	29.1	57.0	1.0
Johnson grass silage	7.0	2.7	32.3	43.0	4.0
Kafir silage	7.1	2.7	18.3	54.4	2.0
Milo silage	6.8	2.4	18.1	51.4	1.8
Sorghum cane silage	5.3	2.8	28.5	48.0	1.7
Sudan grass silage	6.6	2.7	26.4	45.4	3.6

GREEN GRASSES AND CLOVERS

(DRY BASIS)

Barley before booting	15.0	3.2	11.7	30.3	12.0
Bermuda grass, young-tender	12.0	2.5	21.7	50.0	7.2
Bermuda grass, tall	8.0	3.0	24.7	54.0	5.9
Blue stem, little	5.4	2.1	32.1	46.2	2.8
Buffalo grass, young-tender	14.0	3.0	20.0	50.0	8.1
Carpet grass	11.0	2.4	28.0	41.6	6.9
Clover, sweet	15.4	3.1	22.0	37.1	11.9
Clover, burr	20.4	6.8	15.6	31.2	14.8
Clover, white Dutch	19.5	3.0	15.0	34.5	12.5
Clover, hop	16.1	3.8	17.5	36.5	10.1
Dallis grass	12.7	2.8	26.9	39.8	7.4
Johnson grass, young-green	18.0	4.4	21.9	35.3	15.7
Johnson grass, medium height	15.0	2.3	30.3	38.3	8.5
Johnson grass, headed	8.6	1.8	29.7	43.4	4.5
Lespedeza	16.6	2.5	26.7	36.7	12.5
Mesquite grass, young, green	14.0	3.0	20.0	50.0	8.1
Oat before booting	15.0	3.2	11.7	30.3	12.0
Prickly pear	2.7	0.8	8.5	35.2	1.2
Rescue grass	18.0	3.2	23.4	36.1	11.0
Rhodes grass	7.2	3.2	31.2	36.3	3.8
Sudan grass, young	18.0	4.4	21.9	35.3	15.7
Sudan grass, medium height	15.0	2.3	30.3	38.3	8.5
Sudan grass, headed	8.6	1.8	29.7	43.4	4.5
Wheat before booting	15.0	3.2	11.7	30.3	12.0

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